REMARKS

In the **non-final** Office Action of April 1, 2011, the Office noted that claims 32-35, 38, 39, 41 and 43 were pending and rejected claims 32-35, 38, 39, 41 and 43. In this amendment, claims 32 and 43 have been amended, no claims have been canceled, and thus, in view of the foregoing, claims 32-35, 38, 39, 41 and 43 remain pending for reconsideration which is requested. No new matter has been added. The Office's rejections are traversed below.

EXAMINER INTERVIEWS

The undersigned wishes to thank the Examiner for Interviewing the instant Application on May 10, 2011 and June 22, 2011. In the Interview of May 10, 2011 arguments were presented to the patentability of the prior set of claims. The Examiner stated that Suzuki teaches all the features of the invention except for the two layers for which he introduces Ito. The Examiner suggested amending the claims to include features that could only be used in a system with two layers.

In the Interview of June 22, 2011, an amended claim 32 was presented and the prior art was again discussed. The Examiner did not find the amended claim 32 to overcome the prior art and made further suggestion as to amendment, such that if limitations were made to reflect the importance of a second layer interacting with the first layer then the claim would overcome

the prior arts of Suzuki and Ito.   The Applicants herein present amendment in line with the stated limitation.

REJECTIONS under 35 U.S.C. § 103

Claims 32-35, 38, 39, 41 and 43 stand rejected under 35 U.S.C. § 103(a) as being obvious over Suzuki, U.S. Patent Publication No. 2003/0059205 in view of Ito, U.S. Patent Publication No. 2003/0137909 in view of Takahashi, U.S. Patent Publication No. 2003/0179669, in view of Mitsuda, U.S. Patent Publication No. 2003/0193859.   The Applicants respectfully disagree and traverse the rejection with an argument and amendment.

The Applicants have amended claims 32 and 43 so as to clarify that one of the four update block sector pointers indicates an address value of the most inner edge of the recording area into which the record information is lastly recorded and which is in the second recording layer.

The Applicants have amended claim 32 to recite "a first controlling device for controlling said recording device to record the record information alternately into said first recording layer and said second recording layer in an opposite track path manner and thereby to form a plurality of border areas, wherein the border area (i) is a recording unit by which the record information is alternately recorded and (ii) includes a first area portion in the first recording layer and a second

area portion in the second recording layer whose radius position is substantially same as that of the first area portion, **and wherein when the record information is recorded in each border area, the first controlling device controls said recording device (i) to firstly record the record information into the first area portion from an inner circumferential side of the information recording medium to an outer circumferential side of the information recording medium, then (ii) to perform a layer jump which changes a recording layer targeted for recording from the first recording layer to the second recording layer and then (iii) to record the record information into the second area portion from the outer circumferential side to the inner circumferential side**; … a third controlling device for controlling said recording device to record four update block sector pointers, each of which indicates an address value of the recording area other than the anchor area in which the anchor information is update-recorded, **wherein one of the four update block sector pointers indicates an address value of the most inner edge of the recording area into which the record information is lastly recorded and which is in the second recording layer**." (Emphasis added)

Support for the amendment may be found, for example, in Fig. 2, as well as page 27, line 19 through page 28, line 1 and page 29, lines 11-13 of the Specification. The Applicants submit

that no new matter is believed to have been added. Claim 43 has
likewise been amended.

In contrast, Suzuki merely discusses the "multi-session
information recording method" (see ¶ 0029 and Fig. 2 of Suzuki).
According to the multi-session information recording method in a
single layer, as shown in Fig. 2 of Suzuki, the first session is
recorded (as shown in Fig. 2B annotated below) and then the
second session is recorded subsequent to the first session (as
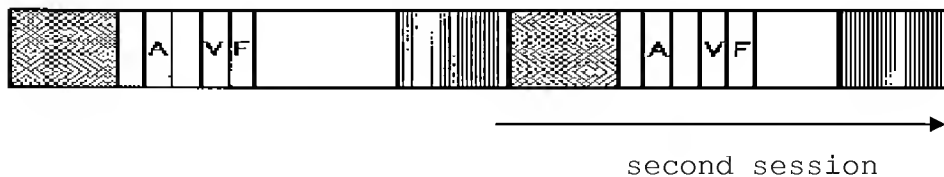shown in Fig. 2C annotated below).

FIG. 2A

FIG. 2B

first session

FIG. 2C

second session
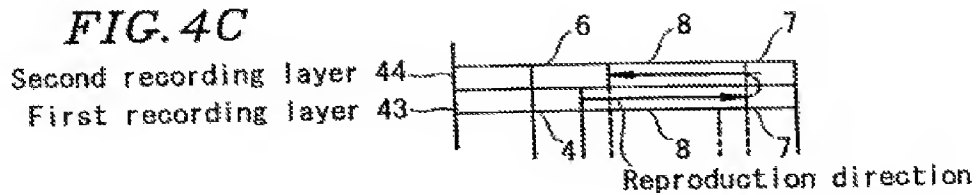
Ito merely discloses the opposite track path manner in
a multi-layered information recording medium, as shown in Fig. 4C
of Ito. Specifically, according to the opposite track path
manner in a multi-layered information recording medium, whole of
the user data area 8 in the first recording layer 43 is recorded

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and then whole of the user data area 8 in the second recording layer 44 is recorded.

FIG.4C
Second recording layer 44
First recording layer 43
Reproduction direction

Therefore, if the multi-session information recording method disclosed in Suzuki is combined with the opposite track path manner in a multi-layered information recording medium disclosed in Ito, the following recording method, which is described in the following reference drawing No.1 (below), can be merely obtained. Namely, first session is recorded only in the first recording layer, and then the second session is recorded only in the first recording layer, and then the third session is recorded over the first and second recording layers.

| 2nd layer | | third session |
| 1st layer | first session | second session |

<Reference Drawing No.1>
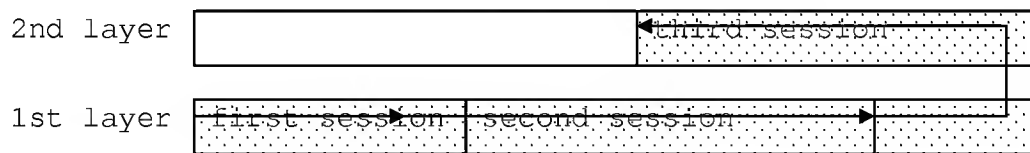
In contrast, according to the recording method of the present claims, it is performed by the unit of the border area whose one example is illustrated in Fig. 2 of the present application. Namely, as illustrated in the following reference drawing No.2, the first border area is recorded such that the

first area portion (i.e. the area portion in the first recording layer) is firstly recorded and then the second area portion (i.e. the area portion in the second recording layer whose radial position is same as that of the first area portion) is recorded, then the second border area is recorded such that the first area portion is firstly recorded and then the second area portion is recorded, and then the third border area is recorded such that the first area portion is firstly recorded and then the second area portion is recorded.

| 2nd layer | first border | second border | third border | |
| 1st layer | first border | second border | third border | |

<Reference Drawing No.2>
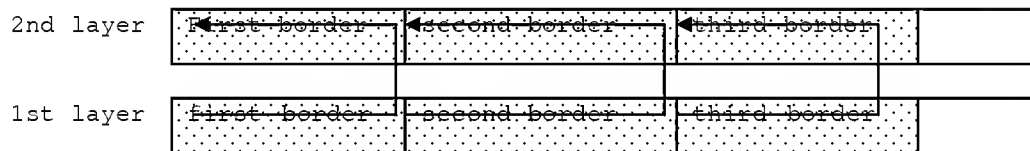
Thus, it is technically obvious that the combination of Suzuki and Ito does not suggest the recording aspect of the present claims which is performed by a unit of the border area and by which the first controlling device controls said recording device (i) to firstly record the record information into the first area portion from an inner circumferential side of the information recording medium to an outer circumferential side of the information recording medium, then (ii) to perform a layer jump which changes a recording layer targeted for recording from the first recording layer to the second recording layer and then (iii) to record the record information into the second area

portion from the outer circumferential side to the inner circumferential side.

The Applicants believe that each of or the combination of Suzuki, Ito, Takahashi and Mitsuda does not disclose the technical problem of the present claims and the second novel feature of the present claims (i.e. one technical solution for solving the technical problem) such that "(i) the anchor information is update-recorded in an area other than the anchor area and (ii) there are recorded four update block sector pointers, each of which indicates an address value of the recording area other than the anchor area in which the anchor information is update-recorded."

The present claims solve such a new technical problem, which is caused by forming the plurality of border area in an above-described aspect, that the position (address) of the area, into which the anchor information is recorded and which is prepared on each of the first and the second recording layer, is changed and cannot be recognized after the two or more border areas are formed and that thereby the file system cannot be read (see page 33 line 14 to page 34 line 2 of the present application). Namely, claims solve such a new technical problem which is caused by the fact that the anchor information is still recorded in the default anchor area while forming two or more border areas.

For example, the "VAT_ICB (Virtual Allocation Table Information Control Block)", which is one example of the anchor information, is originally recorded in a recording area with a LBA (Logical Block Address) of LRA (Last Recorded Address) (see page 31 lines 8 to 22 of the Specification). In this example, if two or more border areas are formed, the anchor information is updated in an area other than the recording area with a LBA of the LRA while the LRA is maintained (i.e. is not changed).

However, although the LRA can be easily searched, because the LRA is not changed after two or more border areas and the LRA is the maximum address value of the recorded area, the area in which the anchor information is updated cannot be easily searched, because the area in which the anchor information is updated is changed every time of the updating and the area in which the anchor information is updated is not an area whose address is the maximum address value of the recorded area. Therefore, if there is not recorded the update block sector pointer, it is difficult or impossible to search the area in which the anchor information is updated.

In this case, according to the present claims, there is recorded the update block sector pointer, which indicates an address value of the recording area other than the anchor area in which the anchor information is update-recorded, it is possible to search the area in which the anchor information is updated, which is changed every time of the updating and which is not an

area whose address is the maximum address value of the recorded area (e.g. see page 50 lines 1 to 9 of the Specification).

Considering the disclosure of Takahashi while considering the above technical problem and technical solution of the present claims, Takahashi merely discloses the anchor which is located on the end of the defect list (see Fig. 1 and ¶ 0132 of Takahashi). Namely, Takahashi merely discloses that the position at which the anchor is located is a fixed position (i.e. the position at which the anchor is always the end of the defect list). Namely, Takahashi does not disclose that the position at which the anchor is located is variable (i.e. the position at which the anchor is other than the end of the defect list). Therefore, according to Takahashi, the above technical problem is not caused because the position at which the anchor is located is always the end of the defect list, which means that the address of the anchor is always maximum address value of the defect list.

Thus, the Applicants believe that each of or the combination of Suzuki, Ito, Takahashi and Mitsuda does not disclose the second novel feature of the present claims such that "(i) the anchor information is update-recorded in an area other than the anchor area and (ii) there are recorded four update block sector pointers, each of which indicates an address value of the recording area other than the anchor area in which the anchor information is update-recorded".

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The Applicants believe that each of or the combination of Suzuki, Ito, Takahashi and Mitsuda does not disclose the third novel feature of the present claims such that "one of the four update block sector pointers indicates an address value of the most inner edge of the recording area into which the record information is lastly recorded and which is in the second recording layer".

Specifically, although the Office asserts in the Office Action that Takahashi teaches the above third feature, as described above, Takahashi merely discloses that the position at which the anchor is located is a fixed position (i.e. the position at which the anchor is always the end of the defect list) (see Fig. 1 and ¶ 0132 of Takahashi). Therefore, anchor identifier 151 of Takahashi merely identifies that the area is an anchor of the defect list 112 (i.e. anchor identifier 151 of Takahashi merely identifies that the area, which is fixed (i.e. not variable) and which may not be the area at which the recording operation is lastly performed, is an anchor of the defect list 112).

In contrast, according to the present claims, since one update block sector pointer indicates an address value of the most inner edge of the recording area into which the record information is lastly recorded and which is in the second recording layer, it is possible to search the area in which the anchor information is updated, which is changed every time of the

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updating and which is not an area whose address is fixed (e.g. see page 50 lines 1 to 9 of the Specification).

Therefore, the Applicants believe that each of or the combination of Suzuki, Ito, Takahashi and Mitsuda does not disclose the third novel feature of the present claims such that "one of the four update block sector pointers indicates an address value of the most inner edge of the recording area into which the record information is lastly recorded and which is in the second recording layer."

The Applicants believe that each of or the combination of Suzuki, Ito, Takahashi and Mitsuda does not disclose the fourth novel feature of the present claims such that "a fifth controlling process controls the recording device to record the anchor information into a border-in area and a border-out area each of which is prepared on said second recording layer and each of which is a border management area to manage the border area, in closing the border area."

Specifically, although the Office asserts in the Office Action that Suzuki teaches the above fourth feature, since each of Suzuki, Takahashi and Mitsuda does not disclose the "border area", as the Examiner recognized, it is obvious that each of Suzuki, Takahashi and Mitsuda does not disclose the "border-in / border-out areas which are to manage the border area". In addition, as described above, the combination of Suzuki and Ito does not disclose the border area, it is obvious the combination

of Suzuki and Ito does not disclose the "border-in / border-out areas which are to manage the border area."

In addition, according to the fourth feature, the following technical effect can be obtained. Specifically, the anchor information is recorded in two places (the border-in area and the border-out area) in closing the border area, even if the area in which the anchor information is updated and which is changed every time of the updating, it is easily search the updated anchor information when the record information is read or reproduced by a unit of the border area.

For at least the reasons discussed above, Suzuki, Ito Takahashi and Mitsuda, taken separately or in combination, fail to render obvious the features of claims 32 and 43 and the claims dependent therefrom.

Withdrawal of the rejections is respectfully requested.

SUMMARY

It is submitted that the claims satisfy the requirements of 35 U.S.C. § 103. It is also submitted that claims 32-35, 38, 39, 41 and 43 continue to be allowable. It is further submitted that the claims are not taught, disclosed or suggested by the prior art. The claims are therefore in a condition suitable for allowance. An early Notice of Allowance is requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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